

## ABSTRACT

The partial evaporation of the sample liquid during X-ray analysis of liquids gives rise to problems, since the quantity of the sample liquid does not remain constant and evaporated gas is liable to invade the measuring paths in which it may lead to measurement falsifications. In order to solve this problem, there is provided a sample container for receiving a sample liquid, which container leaves open an opening at its top, and a cover is placed on the free surface of the sample liquid. The cover is not rigidly connected to the wall of the sample container and, therefore, allows pressure equalization. Evaporation phenomena are almost completely precluded as a result of the covering of the liquid surface.